CLAIMS:

1. A catheter comprising:

a catheter shaft having a proximal end and a distal end;

an inflation balloon having a proximal waist portion and a distal waist portion; and

a catheter tip having a proximal end, a distal end, a main shaft portion and a distal shaft portion, said catheter tip proximal end being coupled to said catheter shaft distal end, said balloon distal waist portion being attached to said catheter tip distal shaft portion; and said catheter tip main shaft portion being substantially coextensive with said balloon.

2. The catheter of claim 1, further comprising at least one marker.

3. The catheter of claim 2, wherein said marker is a radiopaque marker.

4. The catheter of claim 2, wherein said marker is an MRI marker.

5. The catheter of claim 1, wherein said catheter tip distal end comprises a radiused tip.

6. The catheter of claim 1, wherein said catheter tip further comprises a recessed portion.

7. The catheter of claim 1, wherein said catheter tip further comprises a hub portion.

8. The catheter of claim 7, wherein said catheter tip comprises a molded catheter tip and said hub portion is formed integrally with the catheter tip.

9. The catheter of claim 8, further comprising at least one marker.

10. The catheter of claim 9, wherein said radiopaque marker is insert molded.

11. The catheter of claim 10, wherein an outer surface of said radiopaque marker is flush with an outer surface of said catheter tip.

12. The catheter of claim 1, further comprising a stiffener.

13. The catheter of claim 12, wherein the stiffener is a spring.

14. The catheter of claim 1, wherein said catheter tip further comprises a marker region.

15. The catheter of claim 1, wherein said catheter tip further comprises a first region and a second region, said first region having greater flexibility than said second region.

16. The catheter of claim 15, wherein said second region comprises entrained stiffening fibers.

17. The catheter of claim 1, further comprising:

an outer catheter shaft;

wherein said balloon proximal waist portion is coupled to said outer catheter shaft.

18. The catheter of claim 1, wherein said catheter tip is coupled to said catheter shaft by heat bonding.

19. The catheter of claim 1, wherein said catheter tip is coupled to said catheter shaft by radio-frequency welding.

20. The catheter of claim 1, wherein said catheter tip is coupled to said catheter shaft with an adhesive.

21. The catheter of claim 1, wherein the catheter is a stent delivery catheter.

22. The catheter of claim 21, further comprising a stent mounted about the balloon.

23. The catheter of claim 22, wherein the stent is an inflation expandable stent.

24. The catheter of claim 22, wherein the stent is a self-expanding stent.

25. The catheter of claim 1, wherein said catheter tip includes a shaped portion, the cross-section of the shaped portion having a plurality of sides.

26. The catheter of claim 25, wherein the shaped portion is triangular.

27. A catheter tip comprising:

a proximal free end, a distal free end and a length of at least 4 millimeters.

28. The catheter tip of claim 27, wherein said length is less than 70 millimeters.

29. The catheter tip of claim 27, wherein said length is at least 4 times its width.

30. The catheter tip of claim 27, further comprising a recessed portion.

31. The catheter tip of claim 30, further comprising a second recessed portion.

32. The catheter tip of claim 27, further comprising a raised hub portion.

33. The catheter tip of claim 27, wherein said distal free end comprises a radiused tip.

34. The catheter tip of claim 27, further comprising at least one marker.

35. The catheter tip of claim 34, wherein said marker is an MRI marker.

36. The catheter tip of claim 34, wherein said marker is a radiopaque marker.

37. The catheter tip of claim 34, wherein said marker is insert molded.

38. The catheter tip of claim 37, wherein an outer surface of said marker is flush with an outer surface of the catheter tip.

39. The catheter tip of claim 34, wherein said marker comprises a hub portion.

40. The catheter tip of claim 27, further comprising a marker region.

41. The catheter tip of claim 27, further comprising a first region and a second region, said first region having greater flexibility than said second region.

42. The catheter tip of claim 41, wherein said second region further comprises entrained stiffening fibers.

43. The catheter tip of claim 27, further comprising:

a distal shaft portion; and

a balloon having a proximal waist portion and a distal waist portion;

wherein said balloon distal waist portion is coupled to said catheter tip distal shaft portion.

44. The catheter tip of claim 43, wherein said balloon proximal waist portion is proximal to said catheter tip first free end.

45. The catheter tip of claim 43, wherein said balloon proximal waist portion is distal to said catheter tip first free end.

46. The catheter tip of claim 27, further comprising a stent mounted about said catheter tip.

47. The catheter tip of claim 46, wherein said stent is a self-expanding stent.

48. The catheter tip of claim 46, wherein said stent is an inflation expandable stent.

49. The catheter tip of claim 27, further comprising a shaped portion, the cross-section of the shaped portion having a plurality of sides.

50. The catheter tip of claim 49, wherein the shaped portion is triangular.

51. The catheter tip of claim 27, further comprising a stiffener.

52. The catheter tip of claim 51, wherein the stiffener is a spring.

53. A method of manufacturing catheter tip comprising:

molding or extruding a catheter tip having a proximal end, a distal end and a feature selected from a group consisting of a hub portion, a recessed portion, a marker, a stiffener, a marker region and a fiber entrained region.

54. The method of claim 53, further comprising insert molding at least one marker in the catheter tip.

55. The method of claim 53, wherein said catheter tip is further coupled to a catheter shaft by heat bonding.

56. The method of claim 53, wherein said catheter tip is further coupled to a catheter shaft by radio-frequency welding.

57. The method of claim 53, wherein said catheter tip is further coupled to a catheter shaft with an adhesive.